

# Module interface specification — Database

## 1. Introduction

This API document is provided by team EMPIRE, Jilin University, focusing on the service provided by the database and its access method.

## 2. Interface Overview

### a. Service Provided

Service	Provided by
Register a new user	signUp
Verify whether a user exists or not	verifyUserName
Get the password	getPasswd
Add facial information	addFaceInfo
Get facial information	getFaceInfo
Store user's image into database	saveImage
Get user's image from database	getImage

### b. Access Methods

Access Method	Parameter Name	Parameter Type	Description	Exceptions
signUp	1.userName 2.passwdMd5 3.retCode (O) P.S.: O stands for the returned value	1.String 2.string 3.string	1.The identification of user, any two IDs must not be the same. 2.The login password for users. 3.The respond to the calling for the interface.	1; 2; 3; 4;
verifyUserName	1.userName 2.retCode			3;
getPasswd	1.userName 2.passwdMd5 (O) 3.retCode (O)	1.String 2.String 3.string	1.ditto 2.ditto 3.ditto	2; 3;

addFaceInfo	1.userName 2.webName 3.id(feather code) 4.retCode (O)	1.String 2.string 3.string 4.string	1.ditto 2.Name of face recognition web services, e.g. face++. 3.The feather code is provided by face recognition web services and need to be correspond with each web service. 4. ditto	2; 3; 5; 6;
getFaceInfo	1.userName 2.webName 3.id 4.retCode(O)	1.String 2.string 3.string 4.string	1. ditto 2. ditto 3. ditto 4. ditto	2; 3; 5;
saveImage	1.userName 2.imageData 3.retCode(O) 4.imageUrl	1.string 2.Image(string) 3.string 4.String	1. ditto 2.Image data, can be base64. 3.The returned value includes the number of images uploaded successfully.	2; 7;
getImage	1.userName 2.retCode (O)	1.string 2.string	1. ditto 2.Return the url of images of the user.	2; 7;

### c. Access Method Effects

Access Method	Description
signUp	Using the POST Method of HTTP Protocol, pass the username and passwdMd5 parameters and return in JSON format including field: retCode.
verifyUserName	
getPasswd	Using the POST Method of HTTP Protocol, pass the username parameter and return in JSON format including fields: retCode, passwdMd5.
addFaceInfo	Using the POST Method of HTTP Protocol, pass the username, webName and FaceFeature parameters and return in JSON format including field: retCode.
getFaceInfo	Using the POST Method of HTTP Protocol, pass the username, webName and id parameters and return in JSON format including fields: retCode and id.

saveImage	Using the POST Method of HTTP Protocol, pass the username and imageData parameters. Put the image into body, then return in JSON format including fields: retCode and userImageNum.
getImage	Using the POST Method of HTTP Protocol, pass the username, webName and id parameters and return in JSON format including fields: retCode and imageUrl.

### 3. Exception Dictionary

Exception Name	Description	retCode
1.Username already registered	It is necessary to check if the username has already been registered when a new user is registering. Usernames cannot be the same.	[1,201]
2.Username does not exist	When operating on the information of a user whose username does not exist, the system throw this exception.	[1,203]
3.Username format error	Username format ineligible (At the present stage, the authentication server ensures this).	[1,300]
4.Password format error	Password format ineligible (At the present stage, the authentication server ensures this).	[1,300]
5.Name of face recognition web service provider error	Ineligible web service name is passed (At the present stage, the authentication server ensures this).	[1,300]
6.Face identification format error	Error face identification is passed.	[1,203]
7.Image format error	The image format is error.	[1,301]